Appl. No. : 09/454,870
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AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method ~~of transmitting~~aggregating a plurality of data packets ~~from~~ on a server computer ~~to at least one client computer~~, the method comprising:

determining a server load of the server computer; and

in response to determining the server load, accumulating the plurality of data packets into an aggregated data packet until ~~the~~ a size of the aggregated data packet exceeds a minimum threshold size without exceeding a maximum threshold size, and wherein the ~~size of the~~ minimum threshold size or the maximum threshold size is related to the server load.

2. Cancelled.

3. (Currently Amended) The method of Claim 1, wherein determining the server load comprises comparing ~~the~~ a number of data packets that are overdue to ~~the~~ a total number of data packets.

4. (Currently Amended) The method of Claim 1, wherein determining the server load comprises comparing ~~the~~ a number of network events processed by a server program that is executing on the server computer due to exceeding a time out threshold to ~~the~~ a total number of network events that the server program processes.

5. (Original) The method of Claim 4, wherein the network events are selected from the group comprising: a play command, a pause command, a seek command, a ping command, and a re-send command.

6. (Currently Amended) The method of Claim 1, wherein the server load is based at least in part upon ~~the~~ an actual transmission rate between the server computer and ~~the~~ a client computer.

7. Cancelled.

8. (Currently Amended) The method of Claim 1, wherein the size of the plurality of data packets are not increased larger than ~~the size of~~ a maximum transmission unit size for any intermediary network device that is in ~~the~~ a transmission path between the server computer and ~~the~~ a client computer on the network.

9. Cancelled.

10. Cancelled.

11. (Currently Amended) The method of Claim 1, wherein the minimum threshold size is about 200 bytes and wherein the maximum threshold is about 300 bytes.

12. (Currently Amended) The method of Claim 1, wherein the minimum threshold size is about 700 bytes and wherein the maximum threshold is about 1000 bytes.

13. (Currently Amended) The method of Claim 1, wherein the minimum threshold size is about 1000 bytes and wherein the maximum threshold is about 1350 bytes.

14. Cancelled.

15. (Currently Amended) The method of Claim 1, additionally comprising increasing or decreasing the number of channels that are used to transmit a plurality of ~~the~~ streamable data objects.

16. (Currently Amended) The method of Claim 1, additionally comprising either increasing or decreasing ~~the~~ a frequency of transmission of ~~one or more~~ the plurality of data packets ~~that are used to transmit the streamable data objects~~.

17. (Currently Amended) A server computer for ~~transmitting~~ aggregating data packets via a communications network, the server computer comprising:

a data memory operative to store a plurality of data packets; and

a server program stored in a program memory for determining a server load and for, in response to determining the server load, repackaging at least two of the plurality of data packets into a single data packet having a size; and for initiating the transmitting of the data packets to a the communications network, wherein ~~the size of the~~ single data packet size exceeds a minimum threshold size without exceeding a maximum threshold size, and wherein the ~~size of the~~ minimum threshold size or the maximum threshold size is ~~dependent~~ set as a function of~~on~~ the load of the server computer.

18. (Original) The system of Claim 17, wherein the data packets collectively comprise a streamable data object.

19. Cancelled.

20. (Currently Amended) The system of Claim 17, wherein determining the server load comprises comparing ~~the~~ a number of data packets that are overdue to ~~the~~ a total number of data packets.

21. (Currently Amended) The system of Claim 17, wherein determining the server load comprises comparing ~~the~~ a number of network events processed by a server program that is executing on the server computer due to exceeding a time out threshold to ~~the~~ a total number of network events that the server program processes.

22. (Original) The system of Claim 17, wherein the one or more network events is selected from the group comprising: a play command, a pause command, a seek command, a ping command, and a re-send command.

23. Cancelled.

24. (Currently Amended) The system of Claim 17, additionally comprising, in response to determining the system condition, increasing ~~the~~ a number of channels that are used to transmit the ~~streamable data objects~~ plurality of data packets.

25. (Currently Amended) The system of Claim 17, additionally comprising, in response to determining the system conditions, either increasing or decreasing ~~the~~ a frequency of transmission of ~~one or more~~ the plurality of data packets.

26. (Currently Amended) A system ~~for transmitting~~ aggregating a plurality of data packets ~~from~~ on a server computer ~~to at least one client computer~~, the system comprising:

means for determining a server load; and

~~means for, in response to determining the system conditions, increasing the size of one or more data packets that are transmitted from a server computer to a client computer, wherein the size exceeds a minimum threshold without exceeding a maximum threshold, and wherein the size of the minimum threshold or the maximum threshold is dependent on the load of the server computer.~~

means for in response to determining the server load, accumulating the plurality of data packets into an aggregated data packet until a size of the aggregated data packet exceeds a minimum threshold size without exceeding a maximum threshold size, and wherein the size of the minimum threshold size or the maximum threshold size is related to the server load.

27. Cancelled.

28. (Currently Amended) A system for aggregating data packets, the system comprising:

a plurality of data packets that collectively comprise one or more streamable data objects; and

a server computer operably connected to a client computer via a network, the server computer transmitting the data objects to the server computer, the server computer periodically determining, based upon the load of the server computer, whether to aggregate one or more of the data packets into an aggregated data packet having a size, wherein the size of the aggregated data

packet exceeds a minimum threshold size without exceeding a maximum threshold size, and wherein the ~~size of the~~ minimum threshold size or the maximum threshold size is dependent on the load of the server computer.

29. (Currently Amended) The system of Claim 28, wherein determining the server load comprises comparing ~~the~~ a number of data packets that are overdue to ~~the~~ a total number of data packets

30. (Currently Amended) The system of Claim 28, wherein determining the server load comprises comparing ~~the~~ a number of network events processed by a server program that is executing on the server computer due to exceeding a time out threshold to ~~the~~ a total number of network events that the server program processes.

31. (Original) The system of Claim 30, wherein the network events are selected from the group comprising: a play command, a pause command, a seek command, a ping command, and a re-send command.

32. (Currently Amended) The system of Claim 28, wherein the server load is based at least in part upon ~~the~~ an actual transmission rate between the server computer and ~~the~~ a client computer.

33. (Currently Amended) The method of Claim 28, wherein the data packets are not aggregated larger than the size of a maximum transmission unit for any intermediary network device that is in the transmission path between the server computer and ~~the~~ a client computer.

34. Cancelled.

35. (Currently Amended) The method of Claim 28, wherein the size of the minimum threshold relates to a quality of presentation of the ~~streamable data objects~~ plurality of data packets and the maximum threshold relates to a maximum transmission unit.

36. Cancelled.

37. (Previously Presented) The system of Claim 28, wherein the minimum threshold is about 200 bytes and wherein the maximum threshold is about 300 bytes.

38. (Previously Presented) The system of Claim 28, wherein the minimum threshold is about 700 bytes and wherein the maximum threshold is about 1000 bytes.

39. (Previously Presented) The system of Claim 28, wherein the minimum threshold is about 1000 bytes and wherein the maximum threshold is about 1350 bytes.

40. (Currently Amended) A method of aggregating data packets, the method comprising:

determining, based upon the load of a server computer, whether to aggregate one or more of the data packets into an aggregated data packet with a size, wherein the size of the ~~single~~ aggregated data packet exceeds a minimum threshold size without exceeding a maximum threshold size, and wherein the ~~size of the~~ minimum threshold size or the maximum threshold size is ~~dependent on~~related to the load of the server computer; and

transmitting the aggregated data packet to a client computer.

41. (Currently Amended) The method of Claim 40, wherein the one or more data packets are not aggregated in an aggregated data packet larger than the size of a maximum transmission unit for any intermediary network device that is in the transmission path between the server computer and the client computer.

42. (Currently Amended) The method of Claim 40, wherein determining the server load comprises comparing ~~the~~ a number of data packets that are overdue to ~~the~~ a total number of data packets.

43. (Currently Amended) The method of Claim 40, wherein determining the server load comprises comparing ~~the~~ a number of network events processed by a server program that is executing on the server computer due to exceeding a time out threshold to ~~the~~ a total number of network events that the server program processes.

44. (Previously Presented) The method of Claim 43, wherein the network events are selected from the group comprising: a play command, a pause command, a seek command, a ping command, and a re-send command.

45. (Currently Amended) The method of Claim 40, wherein the server load is based at least in part upon ~~the~~ an actual transmission rate between the server computer and the client computer.

46. Cancelled.

47. Cancelled.

48. (Previously Presented) The method of Claim 40, wherein the minimum threshold is about 200 bytes and wherein the maximum threshold is about 300 bytes.

49. (Previously Presented) The method of Claim 40, wherein the minimum threshold is about 700 bytes and wherein the maximum threshold is about 1000 bytes.

50. (Previously Presented) The method of Claim 40, wherein the minimum threshold is about 1000 bytes and wherein the maximum threshold is about 1350 bytes.

51. (Currently Amended) The method of Claim 40, wherein the size of the minimum threshold relates to a quality of presentation of the ~~stream able data objects~~ data packets and the maximum threshold relates to a maximum transmission unit.

52. Cancelled.

53. Cancelled.

54. Cancelled.

55. (Currently Amended) A method of ~~transmitting a plurality of data packets from a server computer to at least one remotely located client computer via a network~~ generating data packets, the method comprising:

determining, in a server device, a maximum transmission unit value of an intermediary network device being disposed on the network between a client device and the server device, the maximum transmission unit value identifying a largest packet size that is capable of being transported by the intermediary network device via the network; and

generating a data packet with a size of the data packet size being ~~no larger than~~ limited to the maximum transmission unit value.

56. (Previously Presented) The method of Claim 55, wherein the size of the data packet is not larger than the size of a maximum transmission unit for any intermediary network device that is in the transmission path between the server device and the client device.

57. (Currently Amended) The method of Claim 55, additionally comprising transmitting the generated packet from the server device to the client device via the Internet.

58. Cancelled.

59. Cancelled.

60. Cancelled.

61. (Currently Amended) A computer readable media storing instructions that when executed performs the steps comprising:

determining, in a server device, a maximum transmission unit value of an intermediary network device being disposed in a network between a client device and the server device, the maximum transmission unit value identifying a largest packet size that is capable of being transported by the intermediary network device via the network; and

~~building~~ generating a data packet with a size, ~~the size of the data packet~~ set at least in part as a function of ~~being based at least in part on~~ the load of the server device and limited to ~~the size of the data packet being no larger than~~ the maximum transmission unit value.

62. (Previously Presented) The computer readable media of Claim 61, wherein the size of the data packet is not larger than the size of a maximum transmission unit for any intermediary network device that is in the transmission path between the server device and the client device.

63. (Previously Presented) The computer readable media of Claim 61, additionally comprising transmitting the packet from the server device to the client device via the Internet.

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64. (Currently Amended) A method comprising:

determining, in a transmitting device, a maximum transmission unit value of an intermediary network device being disposed on a network between a receiving device and the transmitting device, the maximum transmission unit value identifying a largest packet size that is transported by the intermediary network device via the network;

generating a data packet with a size ~~of the data packet~~ set at least in part as a function of a ~~being based at least in part on the~~ load of the server device and limited to ~~the size of the data packet being no larger than~~ the maximum transmission unit value; and

transmitting the data packet to the receiving device via at least in part the intermediary device.

65. (Previously Presented) The method of Claim 64, wherein the size of the data packet is not larger than the size of a maximum transmission unit for any intermediary network device that is in the transmission path between the server device and the client device.

66. (Previously Presented) The method of Claim 64, wherein the data packet contains video information.

67. (Currently Amended) A method comprising:

determining, in a transmitting device, a maximum transmission unit value of an intermediary network device disposed on a network between a receiving device and the transmitting device, the maximum transmission unit value identifying a largest packet size that is capable of being transported by the intermediary network device ~~during a time period;~~

aggregating data packets ~~until~~to ensure ~~the~~ a size of the aggregated data packets exceed a ~~certain~~ minimum threshold value, ~~the size of the aggregate data packets being no larger than~~ and are limited to the maximum transmission unit value; and

transmitting the aggregated data packets to the receiving device via at least in part the intermediary device.

68. (Currently Amended) The method of Claim 67, wherein the size of the data packet is not larger than ~~the size of~~ a maximum transmission unit size for any intermediary network device that is in ~~the~~ a transmission path between the ~~server~~ transmitting device and the ~~client~~ receiving device.

69. (Previously Presented) The method of Claim 67, wherein the data packet contains video information.

70. (New) The method of Claim 40, wherein the server load is a function of a number of computers that have requested a streamable data object

71. (New) The method of Claim 40, wherein the server load is a function of a number of computers that are behind in a scheduled delivery time.

72. (New) The method of Claim 40, wherein minimum threshold is either about 200, 700, or 1000 bytes.

73. (New) A method aggregating a plurality of data packets on a server computer, the method comprising:

determining a server load of the server computer; and

in response to determining the server load, accumulating the plurality of data packets into an aggregated data packet until a size of the aggregated data packet exceeds a minimum threshold size, and wherein the minimum threshold size is related to the server load.

74. (New) The method of Claim 73, wherein the server load is a function of a number of computers that have requested a streamable data object.

75. (New) The method of Claim 73, wherein the server load is a function of a number of computers that are behind in a scheduled delivery time.

76. (New) The method of Claim 73, wherein the minimum threshold size increases as the server load increases.